

FINANCIAL REPORTING QUALITY IN LITHUANIAN STATE-OWNED ENTERPRISES

Kristina Rudžionienė, Marina Gupor

Vilnius University, Lithuania

Abstract

The aim of the research is to assess the quality of financial reporting of state-owned enterprises in Lithuania. Having evaluated the methods of quality assessment of financial statements presented in scientific sources, it was identified that financial accounting quality is often defined in the literature considering its qualitative characteristics. In the paper, fundamental and enhancing qualitative characteristics and the chosen methods of assessment were briefly discussed. The selected method of data collection for research was a content analysis of financial statements in 2017. The indexes for the qualitative characteristics of each individual financial statement were calculated. After the analysis of qualitative characteristics of financial statements, it may be stated that 45.90 % of enterprises have a sufficient and 50.8 % of them an average quality of financial statements. The maximum and the mean values of faithful representation, understandability, comparability and timeliness also reveal similar results that the quality of information is more than average. The total quality index is positively related to the sum of assets, revenues and the number of employees of the enterprise. The state-owned enterprise size indicators (assets, revenues, number of employees) can be considered as the determinants which influence information disclosure in the financial statements.

Keywords: financial reporting, financial reporting quality, state-owned enterprises, Lithuania.

JEL Codes: M41, L15.

Introduction

Financial statements are the most important regulated source of information, which shows the entity's financial position, performance and cash flows (Lithuanian Authority of..., 2017). Financial accounting information presented in financial statements should keep strict requirements in order to present the 'true and fair view' of the enterprise. This information must be qualitative and fully fulfil the needs of the users of accounting information in order for them to be able to make rational decisions. Quality of financial statements is relevant for all enterprises in both, the private and public sectors. Quality of financial reporting is especially important in state-owned enterprises since they provide specific services, produce specific products and carry out other activities in order to meet the government interests. Nonetheless, most of the analysed studies were conducted in the private sector, while the assessment of the quality of the financial statements of the state-owned enterprises has not been indicated.

In the recent decade, research related with accounting information quality (accounting quality, financial reporting quality, information quality, disclosure quality, earnings quality, etc.) has been gaining interest, but it is still limited. The analysis of the concepts of financial reporting quality has revealed that there is no unified definition of good accounting and financial reporting information and its quality. There is also no universal methodology for assessing the quality of financial statements. Most researchers distinguish some basic methods for assessing the quality of financial statements: earning management method (Beuselinck and Manigart, 2007; Biddle et al., 2009; Martinez-Ferrero, 2014; Wang et al., 2015; Lim et al., 2015; Herath and Albarqi, 2017), accounting conservatism method (Lim et al., 2015; Wang et al., 2015; Herath and Albarqi, 2017), accrual-based models (Herath and Albarqi, 2017). However, accrual and value relevance models focus only on the quantitative information disclosed in financial statements to assess the financial reporting quality. Other researchers (Hirst et al., 2004; Gaeremynck and Willekens, 2003) focus on specific elements in the annual report, including both financial and non-financial information, but are not able to assess financial reporting quality comprehensively. Another group of researchers (Obaidat, 2007; Van Beest et al., 2009; Braam and Beest, 2013; Kythreotis, 2014; Chakroun and Hussainey, 2014; Renkas et al., 2015) try to assess the quality of financial reporting by examining qualitative characteristics, not just qualitatively, but also quantitatively. Researchers have analysed those qualitative characteristics which are regulated by IFRS Conceptual Framework. After the analysis of the literature on the topic of accounting quality, it has been decided that the best method to comprehensively assess the quality of annual reports of the companies is examining qualitative characteristics quantitatively. This method includes financial information and non-financial information quality assessment. It was used to research quality of financial reporting in the big markets such as the US, UK (Braam and Beest, 2013), Nigeria (Nyor, 2013), Tunisia (Chakroun and Hussainey, 2014), Vietnam (Cuong and Ly, 2017). However, more research is needed in this field, especially in small European markets, such as Lithuania.

Accounting information quality and financial reporting quality have been analysed and investigated by some authors: Kundelienė (2009) has researched the concept of accounting quality and its measurement methods, Rudžionienė and Juozapavičiūtė (2013) have created the model of financial reporting quality in public sector, Tamulaitytė (2014), Stankevičiūtė (2016), Vaičiulytė and Rudžionienė (2016) have discussed the accounting quality, its concepts, determinants, measurement, Katutyte (2017) has identified the motives for choosing the method of measuring of financial reporting quality, Legenzova (2016) has assessed how accounting quality depends on accounting harmonisation process.

Nonetheless, empirical studies on financial reporting quality are still lacking, qualitative characteristics are not quantified in Lithuanian enterprises. The novelty of this research is assessing the quality of financial reporting of publicly available state-owned enterprises.

In Lithuania, the state-owned enterprises and the effectiveness of their asset management have been investigated by Mackevičius et al. (2012), the research on state-owned enterprises management have been made by Jurkonis (2012), Jurkonis and Gineitienė (2013). Klovienė et al. (2015) have examined the ways the state-owned enterprises holding reports are presented in the Baltic countries and they have found a significant difference among the theory and practice. The biggest problem lies in the fact that the practice is lagging behind the theoretical requirements. Nevertheless, the financial reporting quality from the perspective of qualitative characteristics, measuring the financial and non-financial information of Lithuanian state-owned enterprises, has not been analysed yet. Empirical research on financial reporting quality of state-owned enterprises has also not been carried out, only determinants of financial reporting quality and its implications on the financial performance in this sector have been empirically analysed by Dewata et al. (2016) in Indonesia.

The object of research is the quality of the financial reporting of state-owned enterprises in Lithuania.

The aim of the research is to assess the quality of financial reporting of state-owned enterprises in Lithuania.

To achieve the aim of this paper, the comparative analysis of literature related to the present research (regulatory requirements, prior research, etc.) was performed. The content analysis with the coding procedure was applied for the collection of the data from 2017 financial statements of estate-owned enterprises. Standardised scores for each fundamental and enhancing qualitative characteristic and general 14-item index were computed for each individual financial statement. The results of the research were analysed using statistical methods, i.e. statistical observation, compilation and grouping of information, calculation of statistical data. The correlation analysis was performed using the IBM SPSS statistics program.

The paper is structured as follows. In the first part, the theoretical framework of the research is presented, focusing on the definition of financial reporting quality, assessment methods of financial reporting quality and qualitative characteristics. The second part presents the creation of the index of financial reporting quality assessment and other methodology of the research. The third part discusses the results of research and gives the analysis of financial reporting quality in state-owned companies. Finally, the conclusions are drawn.

Literature Review

Financial statements are the main tool to support users' investment and other business decisions. Financial statements that are not clear, brief and effective can have an adverse impact on the users' interpretation of the current financial status of a company. Therefore, financial reporting should be qualitative, which means that it should be useful to the existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity.

In literature, the quality aspect of financial reporting is emphasized. However, today there is no common definition of the "quality of accounting information" (Kundeliene, 2009; Rudžionienė and Juozapavičiūtė, 2013; Tamulaitytė, 2014; Stankevičiūtė, 2016; Vaičiulytė and Rudžionienė, 2016; Legenzova, 2016; Katutytė, 2017). The research on the concepts of quality of accounting information and financial reporting quality reveals that there are many different definitions:

- financial reporting quality is a quality, that positively influences capital providers and other stakeholders in making decisions of investment, credit, and similar resource allocation, enhancing overall market efficiency (Van Beest et al., 2009);

- Jonas and Blanchet (2000) describe financial reporting quality as complete and transparent financial information which is not intended to confuse or to mislead consumers;

- Penman (2002) considers that accounting quality should be discussed in terms of shareholders' interests and the fair valuation of those interests. Penman's notion of accounting quality is based on the usefulness of information for the shareholders and the use of the modified shareholders perspective. Under this perspective, accounting should promote shareholders' interest but also consider the public interest;

- despite the nonexistence of a clear definition of accounting quality, several studies employ measures that are considered proxies of accounting quality, for example, earnings management, timely loss recognition and value relevance (Barth et al., 2001);

- financial reporting quality is the quality, which displays the use of IAS (Barth et al., 2008);

- Biddle et al. (2009) define financial reporting quality as the precision with which financial reporting conveys information about the company's operations, in particular, its anticipated cash flows, that inform equity investors;

- reporting quality refers to the extent to which financial reports of a company communicate its underlying economic state and its performance during the period of measurement (Elbannan, 2011);

- the fundamental qualitative characteristics of financial reporting quality are relevance and faithful representation (IFRSB, 2018).

The quality of financial reporting is crucial not only to the companies themselves but also to other entities. High-quality financial reports provide economic benefits for the enterprise itself (Bauwhede et al., 2015). Lambert et al. (2007) have obtained empirical evidence that the quality of accounting information can influence the cost of capital, both, directly, by affecting the market participants' perceptions about the distribution of future cash flows, and indirectly, by affecting

real decisions that alter the distribution of future cash flows. Chen et al. (2011) have observed that financial reporting quality positively affects private companies investment efficiency in emerging markets and that this effect enhances bank financing and decreases incentives to minimise earnings for tax avoidance purposes. Paiva (2018) has discovered strong and definite evidence that private companies, contracting larger amounts of debt, exhibit higher quality financial reporting. Thus, understanding financial reporting quality is worthwhile to the investor, who needs to effectively evaluate the investment risk in the international capital markets (Tang et al., 2016). It is argued that the quality of financial reports is determined by the value of accounting earnings (Herath and Albarqi, 2017). Higher financial reporting quality can improve investment efficiency by reducing information asymmetries that give rise to frictions such as moral hazard and adverse selection (Biddle et al., 2009).

The quality requirement for financial statements is set out in both national and international legal acts which govern financial accounting and the drawing up of financial statements. The Conceptual Framework for financial reporting represents the foundations of the International Financial Reporting Standards (IFRS). It states that the primary objective of financial reporting is to provide high-quality financial reporting information, concerning economic entities, primarily financial in nature, and useful for economic decision making (FASB, 1999; IASB, 2008). IAS 1¹ also asserts that the purpose of financial statements is to present information which helps the users of a large number of financial statements to make economic decisions about the financial position of an entity, the result of financial performance and cash flows.

Lithuanian Law on Accounting (2001) declares that enterprises should keep accounting in such a way that accounting information is appropriate, objective and comparable, that it is provided in time and is comprehensive and useful for internal and external information users. The Law on Financial Statements of Enterprises (2001) sets the general purpose of financial statements that financial statements must present the true and fair view of enterprise's assets, equity, liabilities, income, expenses, and cash flows. 1st Business Accounting Standard² requires that "financial statements shall present fairly the financial position, assets, equity, liabilities, performance and cash flows of an entity", "disclosures in annual financial statements shall be provided in a clear and understandable form to enable their users to make sound decisions" and "disclosures in financial statements shall be neutral and reliable". These national legal requirements comply with international regulations and include qualitative characteristics.

Many authors stress the importance of high-quality financial reports. One of the key problems found in previously discussed literature is how to operationalise and measure this quality (Van Beest et al., 2009). Assessing of quality of financial reporting requires a wide range of measurements including models, proxies, qualitative characteristics, and other elements for financial reports (Herath and Albarqi, 2017). The quality of financial reporting is a multidimensional concept, broader than just the quality of the profit derived from financial statements, therefore, the assessment would have to be based on financial information and non-financial, as well as mandatory and voluntary disclosure included in the statement of the company (Cuong and Ly, 2017).

The analysis of the existent literature on this topic has revealed that there is little agreement among researchers on how to assess financial reporting quality. Van Beest et al. (2009) have analysed assessment of the quality of financial reporting and have stated that various measurement methods are used. They provide a non-exhaustive classification of types of methods, most widely used in the literature to assess financial reporting quality:

- 1) accrual models examine the level of earnings management as a proxy for earnings quality;
- 2) value relevance models explore the relationship between stock returns and earnings figures in order to measure the relevance and reliability of financial reporting information;
- 3) research focusing on specific elements in the annual report investigates specific elements in the annual report in depth, e.g., by conducting an experiment;
- 4) methods operationalising the qualitative characteristics consider the level of decision usefulness of financial reporting information by operationalising the qualitative characteristics.

Accrual and value relevance models focus on the measurement of earnings quality. Accrual models are used to measure the extent of earnings management under current rules and legislation (Van Beest et al., 2009). These models assume that managers use discretionary accruals, i.e. accruals over which the manager can exert some control, to manage earnings (Healy and Wahlen, 1999). The main advantage of such quality assessment methods is that the indicators, used in the research, are usually objective since the quality proxies can be assessed and replicated by using publicly available financial information from companies' annual reports and stock markets. Therefore, conclusions, concerning the quality of financial reporting information based on accrual models, do not provide direct and comprehensive evidence concerning the quality of financial reporting information and its dimensions of decision usefulness (Healy and Wahlen, 1999). A big disadvantage of using value relevance model for this kind of research is that the stock market may not be completely efficient. Consequently, stock prices may not represent the market value of the firm in a completely accurate manner (Nichols and Wahlen, 2004). The literature on accrual models and value relevance focus on information disclosed in financial statements to assess the financial reporting quality (Healy and Wahlen, 1999; Nichols and Wahlen, 2004). However, a comprehensive measurement tool of financial reporting quality should at least include the complete annual report, encompassing both financial and non-financial information (Van Beest et al., 2009).

The third group of research concentrates on assessment tools that measure the quality of specific elements of the annual report in depth and includes both financial and non-financial information (Van Beest et al., 2009). For instance,

¹ International Accounting Standard No.1. 2008. Available at <<https://www.iasplus.com/en/standards/ias/ias>>.

² 1st Business Accounting Standard. 2003. Available at <<http://www.avnt.lt/veiklos-sritys/apskaita/verslo-apskaitos-standartai/priimti-standartai/>>.

Hirst et al. (2004) emphasise the use of fair value accounting and financial reporting quality. Gaeremynck and Willekens (2003) examine the relationship between the auditor's report and decision usefulness of financial reporting information. Nevertheless, the current paper supports the view proposed by Van Beest et al. (2009) that research, which concentrates on a specific element in the annual report, has a partial focus, and thus, does not provide a comprehensive overview of total financial reporting quality.

Methods which operationalise the qualitative characteristics aim to assess the quality of different dimensions of information simultaneously in order to determine the decision usefulness of financial reporting information. Jonas and Blanchet (2000), McDaniel et al. (2002) have developed questions, referring to the separate qualitative characteristics in order to assess information quality. Such a method of financial and non-financial information grants a possibility to assess both disclosure and financial reporting quality.

While accrual and value relevance models focus only on quantitative information disclosed in financial statements to assess the financial reporting quality, other researches concentrate on specific elements in the annual report, including both financial and non-financial information, but are not able to assess financial reporting quality comprehensively. Therefore, a compound tool has been chosen to be tested in order to comprehensively assess the quality of financial and nonfinancial reporting information in the annual statements.

As it is defined in the Conceptual Framework for Financial Reporting of the FASB and the IFRSB, there is an agreement on the elements of high-quality financial reporting.

The qualitative characteristics of financial reporting quality include relevance, faithful representation, understandability, comparability, verifiability, and timeliness. They are divided into fundamental qualitative characteristics and the enhancing qualitative characteristics. A theoretical explanation for each of these terms emphasises their importance as qualitative characteristics, and also indicates what qualities are considered fundamental among different frameworks. For this reason the financial reporting quality is operationalised in terms of the fundamental qualitative characteristics (i.e. relevance and faithful representation) which are most important and which determine the content of financial reporting information and the enhancing qualitative characteristics (i.e. understandability, comparability, verifiability and timeliness) which can improve decision usefulness (IASB, 2008).

Relevant financial information is capable of making a difference in the decisions made by users. When information in financial reports influences users in their economic decisions, it is said that this information has the quality of relevance. Financial information is capable of making a difference in decisions if it has the predictive value, the confirmatory value, or both. The predictive value and confirmatory value of financial information are interrelated (IFRSB, 2018). *Relevance* is closely associated with the terms *usefulness* and *materiality* (Herath and Albarqi, 2017). Moreover, when this information assists users in evaluating, correcting, and confirming current and past events, it is beneficial.

Fair value is considered as one of the highly significant indicators of relevance. The usage of fair value as a basis for measurement in an entity is an indicator of a high level of relevance in financial reporting information (Van Beest et al., 2009). Annual reports have a crucial role in determining the level of relevance by disclosing forward-looking information and information about business opportunities and risks and providing feedback on how major market events and significant transactions have affected entities (Van Beest et al., 2009). In the research, relevance was operationalised by using 6 items that were indicative of the predictive and confirmatory value of information (see Table1).

The general purpose of financial reports is to represent economic phenomena in words and numbers. To be useful, financial information must not only be relevant, but it must also faithfully represent the phenomena it is supposed to represent. *Faithful representation* means the representation of the substance of an economic phenomenon instead of the representation of its legal form only (IFRSB, 2018). This concept has the value of explaining how well the obligations and economic resources, including transactions and events, are fully represented in financial reporting (Herath and Albarqi, 2017). A faithful representation seeks to maximise the underlying characteristics of completeness, neutrality and freedom from error.

According to Willekens (2008), researchers have concluded that the auditors' report adds value to financial reporting information by providing reasonable assurance about the degree to which the annual report represents economic phenomena faithfully. Faithful representation was operationalised by using the type of auditors' report (consider Table1).

Understandability is one of the essential information qualities in financial reports. Classifying, characterising and presenting information clearly and concisely makes it understandable. While some phenomena are inherently complex and cannot be made easy to understand, excluding such information would make financial reports incomplete and potentially misleading. Financial reports are prepared for users who have a reasonable knowledge of business and economic activities and who review and analyse the information with diligence (IFRSB, 2018). The quality of understandability is achieved through effective communication. Thus, the better the understanding of the information the users have, the higher the quality will be achieved (Cheung et al., 2010). It is one of the enhancing qualitative characteristics that increases when information is presented and classified clearly and sufficiently. When annual reports are well organised, users can comprehend what their needs are (Van Beest et al., 2009).

In the paper, understandability was measured by the means of the items that emphasise the transparency and clarity of the information presented in the explanatory note (Van Beest et al., 2009). The usage of graphs and tables helps to present information clearly, and the usage of language and technical jargon can be followed easily (see Table1).

Information about a reporting entity is more useful if it can be compared with similar information about other entities and with similar information about the same entity from another period or another date. *Comparability* enables users to identify and understand similarities in, and differences among, items (IFRSB, 2018). Comparability is the concept that allows users to compare financial statements to determine the financial position, cash flow, and performance of an

entity. This comparison gives users a possibility to compare across time and among other companies of the same period (Van Beest et al., 2009).

To indicate this aspect, the notes in financial reports should disclose and explain all the changes in accounting policies and the implications of these changes, not to mention the importance of consistency in applying accounting policies and principles. Furthermore, the current accounting period results can be compared with the ones from previous periods. Finally, presenting financial index numbers and ratios contributes to the comparison with other organisations (Van Beest et al., 2009). The quality of comparability is measured by three items relating to a consistent application of accounting policies and procedures (consider Table1).

Timeliness is another enhancing qualitative characteristic. *Timeliness* indicates that information is available to decision-makers on time in order to be capable of influencing their decisions (IFRSB, 2018). When assessing the quality of reporting in an annual report, timeliness is evaluated using the period between the year-end and the issuing date of the auditor's report, i.e. the period of days it took for the auditor to sign the report after the financial year-end (Van Beest et al., 2009) (see Table1).

Following the analysis of the main qualitative characteristics indicators, the methodology of financial reporting quality assessment of state-owned enterprises in Lithuania will be presented in the next section.

The Methodology of Financial Reporting Quality Assessment

In order to construct a comprehensive measurement tool for financial reporting quality, the financial reporting quality assessment methodology of several authors was analysed (Van Beest et al., 2009; Braam and Beest, 2013; Herath and Albarqi, 2017). Braam and Beest (2013) explored whether it was possible to measure each fundamental and enhancing qualitative characteristic separately. Then, to establish whether this could be achieved, they used the multiple items that had been applied in the previous studies, gathering together a set of existing measurement tools.

Based on the previous research (mostly Braam and Beest, 2013), it was decided to assess the financial reporting quality in six steps:

1. In the first step, it was analysed which information in financial statements of enterprises reflects qualitative characteristics and how it can be quantified by using their predefined measurement scales (the results of this analysis are given in Table1).

**Table 1. Measurement Items Used to Operationalise Qualitative Characteristics
(including the measurement scales)**

Question No.	Question	Operationalisation
<i>Relevance</i>		
R1	Does the company use fair value instead of historical cost?	
R2	Does the presence of non-financial information in terms of business opportunities and risks complement the financial information?	0 – no information, it is required;
R3	Does the risk section provide insights into the risk profile of the company?	1 – no information, it is not required;
R4	Does the explanatory note contain a proper disclosure of the extraordinary gains and losses?	2 – presented information.
R5	Are the intangible assets disclosed?	
R6	Are the “off-balance” activities disclosed?	
<i>Faithful representation</i>		
F1	Which type of auditors' report is included in the financial reporting?	0 – adverse opinion; 1 – unqualified opinion; 2 – qualified opinion.
<i>Understandability</i>		
U1	Does the presence of graphs and tables clarify the presented information?	
U2	Does the explanatory note contain technical jargon in the perception of the researcher?	0 – no information; 1 – very limited information;
U3	Is there a glossary?	2 – presented information.
<i>Comparability</i>		
C1	Are the changes in accounting policies disclosed?	0 – no information, it is required;
C2	Are the changes in accounting estimates disclosed?	1 – no information, it is not required;
C3	Does the explanatory note contain information concerning comparison and effects of accounting policy changes?	2 – presented information.
<i>Timeliness</i>		
T1	How many days did it take for the auditor to sign the auditors' report after the book-year end?	Natural logarithm of the amount of days $\text{Ln}(T1) = (\text{release date audit report} - \text{financial year-end date})$

2. In the second step, the population for the research was chosen. It covers 68 state-owned enterprises and their groups in Lithuania on 29th November 2018. The choice was made mainly due to the facts that a) financial statements of state-owned enterprises are publicly available, and that b) they have not been investigated in this regard. Moreover,

4 companies that are under the bankruptcy procedure were removed, and 3 companies did not publicly present their financial statements or other required information. Therefore, a final sample of 61 enterprises was adopted. Financial statements of 2017 were used for the research. The information from the annual financial statements of the state-owned enterprises³ was collected from the website of the Ministry of Economy of the Republic of Lithuania.

State-owned enterprises in Lithuania must prepare their financial statements in accordance with the Lithuanian Business accounting standards and 16 of the selected enterprises prepare their financial statements in accordance with IFRS.

3. In the third step, data for the research from the annual financial statements of state-owned enterprises was collected. The chosen method of data collection was content analysis. Answers to the selected questions from Table 1 were inquired and they were ranked according to the amount of information given. To avoid the differences in the interpretation of the annual statements information, one independent rater assessed the quantitative and qualitative information to determine the items' measurement scores.

4. In the fourth step, standardised scores for the fundamental and enhancing qualitative characteristics listed previously of each individual financial statements were computed. Table 1 provides an overview of the 14 measured items used to operationalise the fundamental and enhancing qualitative characteristics. The table also includes the measurement scales used to assess the value of the distinct items. To ensure the internal validity of these items, the quality measures are based on the analysed literature (Van Beest et al., 2009). To compute these indices, the scores of the individual items per qualitative characteristic were aggregated. The result revealed that relevance has the biggest weigh for the quality of financial statements (12 points from 28). The rating scales from 0 to 2 points were used to assess the scores on the items. Qualitative characteristics (relevance, comparability, understandability) have the following scores: 0 – if no information is found, but it is required in legislation, 1 – if no information is found, but it is not required in legislation (it means that enterprise presents information voluntarily) and 2 – if information is presented. Faithful representation has the scores as follows: 0 – adverse auditor's opinion, 1 – unqualified opinion and 2 – qualified opinion.

This approach has a unique way of measuring the quality of financial reporting (Herath and Albarqi, 2017). It is a compound tool to assess the quality of the financial and non-financial information in the annual reports comprehensively.

5. In the fifth step, based on the financial reporting quality assessment methodology of several authors (Van Beest et al., 2009; Braam and Beest, 2013; Herath and Albarqi, 2017), the 14-item index was constructed which allows the researchers to examine to what extent financial reports meet each of the qualitative characteristics separately and in combination. This comprehensive quality score was calculated as the sum of all 14 indicators. Hence, this index permits measurement of the quality of reporting systems and financial disclosures when using a sample of the listed companies (Herath and Albarqi, 2017).

It was decided that the maximum value of the index should be equated to 100 % (28 points), so that when the ratio of the values was obtained, the result of the index 1 of quality discovery is 3.57 % (100 %/28 points = 3.57 %/1 score). For the interpretation of the ranked values, a model for the quality evaluation of Pivaca et al. (2017) was used: poor quality when the index is 0–20 %, low quality – 21–40 %, average quality – 41–60 %, sufficient quality – 61–80 % and high quality – 81–100 %.

6. In the sixth step, to examine the dependencies between the financial reporting quality and the enterprise's assets, the revenue and the number of employees, a correlation analysis was performed using the IBM SPSS statistics program. The significance level are $\alpha = 0.05$ and $\alpha = 0.01$. In the case of statistically significant correlation, the relationship strength is assessed by the value of the correlation coefficient. If the Sig (2-tailed) value is greater than the theoretical probability 0.05, it is presumed that there is no significant dependence on the variables. Correlation coefficient describes the strength of the correlation. The guide that Evans (1996) suggests for the absolute value of r is applied: 0–0.19 – very weak, 0.20–0.39 – weak, 0.40–0.59 – moderate, 0.60–0.79 – strong, 0.80–1 – very strong correlation. The interpretation of the values is presented in the next section.

Results of Financial Reporting Quality Assessment in State-owned Enterprises

The results in Table 2 demonstrate that the total index of financial reporting quality had the minimum value 4 and the maximum value – 23 points (82%). It suggests that only one state-owned enterprise had the high quality of information disclosure in financial statements. The mean of this quality index is 16.6 (60%). This indicator falls under the average quality range and it is not very far from the mean value in most enterprises (because the standard deviation is only 2.33).

Relevance, the most important qualitative characteristic, has the maximum value 11 from 12 and the minimum value 0, the mean value being 8.34. It may be concluded that the state-owned enterprises present quite relevant information in their financial statements. The maximum and the mean values of faithful representation, understability, comparability and timeliness also display similar results that quality of information is more than average.

³ Annual Financial Statements of the State-owned Enterprises on the Website of the Ministry of Economy of the Republic of Lithuania. Available at <<https://vkc.sipa.lt/en/apie-imones/atviri-duomenys/>>.

Table 2. Summary Statistics of Sample Enterprises

Qualitative characteristic	N	Mean	Std. Deviation	Minimum	Maximum
Quality score of information disclosure	61	16.623	2.33926	4	23
Relevance	61	8.3443	1.53715	0	11
Faithful representation	61	1.8361	0.41554	0	2
Understandability	61	1.9344	0.30924	0	2
Comparability	61	3.4754	1.11962	0	6
Timeliness	61	1.0374	0.60802	0	2
Number of days between the year's end date and the date of the auditor's report	61	87.3115	27.19837	52	215

The number of days between the year's end and the date of the auditor's report is presented separately since it shows the real time of finishing the financial reporting process with the auditor. The shortest process of financial reporting was 52 days and the maximum period was 215 in one enterprise, but the mean term to finish financial reporting was about 2-3 months.

The results in Table 3 reveal that the large part of the enterprises financial reporting has sufficient (45.9 %) and average (50.8 %) quality. Only one enterprise has a high quality and only one has poor quality respectively.

Table 3. Financial Statements Quality Level

Quality characteristics	Rating	Number of enterprises	Number of enterprises (%)
poor quality	0–20%	1	1.6
low quality	21–40%	0	0
average quality	41–60%	31	50.8
sufficient quality	61–80%	28	45.9
high quality	81–100%	1	1.6

The correlation analysis presents the relationship between the total quality index, the qualitative characteristics and the sum of assets, revenues and the number of employees in the state-owned enterprises. The total quality index is positively related to the sum of assets, revenues (the relations are weak) of the enterprise. It indicates that the bigger the enterprise is, the higher quality of disclosed information in financial statements it delivers.

As the relevance has the biggest weight to the calculated quality index, it also is positively related with the analysed indicators of the enterprises (the correlation is weak). Timeliness is weakly negatively related to the revenues and has a moderate negative relationship with the number of enterprise's employees. It suggests that when increasing the enterprise's assets and the number of employees, the auditor's report needs less time to be signed and presented. Thus, decision-makers have less time to get available information.

The faithful presentation has a negative weak relation to the number of employees in the enterprise. The more employees the enterprise has, the lesser the possibility that the auditor's report will be qualified.

Table 4. Correlation of Qualitative Characteristics and Indicators

Qualitative characteristic		Indicators		
		Assets	Revenue	The number of employees
Quality index	Pearson Correlation	0.312*	0.274*	0.231
	Sig. (2-tailed)	0.14	0.032	0.073
Relevance	Pearson Correlation	0.369**	0.368**	0.399**
	Sig. (2-tailed)	0.003	0.004	0.001
Faithful representation	Pearson Correlation	-0.238	-0.053	-0.383**
	Sig. (2-tailed)	0.065	0.686	0.002
Understandability	Pearson Correlation	0.066	0.055	0.072
	Sig. (2-tailed)	0.615	0.675	0.582
Comparability	Pearson Correlation	0.324*	0.227	0.244
	Sig. (2-tailed)	0.011	0.078	0.058
Timeliness	Pearson Correlation	-0.232	-0.287*	-0.348**
	Sig. (2-tailed)	0.072	0.025	0.006

** Correlation is significant at the 0.01 level (2tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Understandability has no relationship with the enterprise size indicators.

Comparability is weakly positively related to the enterprise's assets, i.e. the more assets the enterprise has, the more disclosed information about accounting policy, accounting estimates and their changes in explanatory notes is presented.

Summarising the results obtained, it may be argued that the enterprise size indicators (assets, revenues, the number of employees) can be considered as the determinants which influence information disclosure in the financial statements.

Conclusions and Discussions

The aim of this study was to assess the quality of financial reporting of state-owned enterprises in Lithuania. No unified definition of accounting information quality in financial reporting is provided in the scientific literature. Moreover, there are many methods of financial reporting quality assessment. Assessment of the quality financial reporting is important since it improves the quality of economic decisions of users, and enhances the efficiency of the entire market. Excluding indirect assessment methods, qualitative characteristics have been usually analysed in order to evaluate the quality of disclosed information in financial statements. Qualitative characteristics should be evaluated quantitatively in order to compare research results.

State-owned enterprises present relevant enough information in their financial statements. The maximum and the mean values of faithful representation, understandability, comparability and timeliness also display similar results that quality of information is more than average. The shortest process of financial reporting was 52 days and the maximum period was 215 in one enterprise, but the mean term to finish financial reporting was about 2-3 months.

It can be claimed, that many state-owned enterprises have an average (50.8 %) and sufficient (45.9 %) quality of financial reports. Relevance and faithful representation have a high score of quality, whereas comparability, understandability and timeliness have slightly lower scores.

The enterprise size indicators (assets, revenues, number of employees) can be considered as the determinants which influence information disclosure in the financial statements.

This research, however, is subjected to several limitations. Firstly, the annual financial statements of one period (2017) were included in the research. Generally, the study for the better comparability of data requires more than one period of data. Secondly, some specific requirements for financial reporting of state-owned enterprises could have been analysed, including them to the quality index calculation. Further research, involving more periods of annual statements and an improved quality index calculation could contribute to the reliability of results.

Overall, it can be concluded, that more research is needed to improve conceptually-based financial reporting quality assessment, as it would help to identify the key information dimensions that make reports useful for decision-making.

References

- BARTH, M.; BEAVER, W.; LANDSMAN, W. 2001. The Relevance of the Value Relevance Literature for Financial Accounting Standard Setting: Another View. *Journal of Accounting and Economics*, vol. 31, no.1–3, 77–104.
- BARTH, M.; LANDSMAN, W.; LANG, M. 2008. International Accounting Standards and Accounting Quality. *Journal of Accounting Research*, vol. 46, no. 3, 467–498.
- BAUWHEDDE, H. W.; DE MEYERE, M.; VAN CAUWENBERGE, P. 2015. Financial Reporting Quality and the Cost of Debt of SMEs, *Small Bus Econ*, vol. 45, 149–164.
- BEUSELINCK, C.; MANIGART, S. 2007. Financial Reporting Quality in Private Equity Backed Companies: The Impact of Ownership Concentration. *Small Business Economics*, vol. 29(3), 261–274.
- BIDDLE, G. C.; GILLES, H.; RODRIGO, S. V. 2009. How Does Financial Reporting Quality Relate to Investment Efficiency? *Journal of Accounting and Economics*, vol. 48, no. 2, 112–131.
- BRAAM, G.; BEEST, F. 2013. Conceptually-Based Financial Reporting Quality assessment. An Empirical Analysis on Quality Differences between UK Annual Reports and US 10-K Reports. *NiCe Working Paper 13-106*. Available at <<http://www.ru.nl/nice/workingpapers>>.
- CHAKROUN, R.; HUSSAINEY, K. 2014. Disclosure Quality in Tunisian Annual Reports. *Corporate Ownership and Control*, vol. 11 (4), 58–80.
- CHEN, F.; HOPE, O. K.; LI, Q.; WANG, X. 2011. Financial Reporting Quality and Investment Efficiency of Private Firms in Emerging Markets. *The Accounting Review*, vol. 86, no. 4, 1255–1288.
- CHEUNG, E.; EVANS, E.; WRIGHT, S. 2010. An Historical Review of Quality in Financial Reporting in Australia. *Pacific Accounting Review*, vol. 22, no 2, 147–169.
- CUONG, N.T.; LY, D.T. 2017. Measuring and Assessing the Quality of Information on the Annual Reports: The Case of Seafood's Companies Listed on the Vietnam Stock Market. *International Research Journal of Finance and Economics*, Issue 160, 26–40.
- DEWATA, E.; HADI, H.; JAUHARI, H. 2016. Determinants of Financial Reporting Quality and its Implications on the Financial Performance of State-owned Enterprises (SOES). *Risk Governance and Control: Financial Markets and Institutions Special issue "Macroeconomic Risks and State Governance"*, vol. 6, 4, 521–530.
- ELBANNAN, M. A. 2011. Accounting and Stock Market Effects of International Accounting Standards Adoption in an Emerging Economy. *Review of Quantitative Finance and Accounting*, vol. 36, no. 2, 207–245.
- EVANS, J. D. 1996. *Straightforward Statistics for the Behavioral Sciences*. Brooks/Cole Publishing; Pacific Grove, Calif.
- FASB. 1999. *International Standard Setting: A Vision for the Future*. Norwalk.
- GAEREMYNCK, A.; WILLEKENS, M. 2003. The Endogenous Relationship between Audit-Report Type and Business Termination: Evidence on Private Firms in a NonLitigious Environment. *Accounting and Business Research*, vol. 33(1), 65–79.
- HEALY, P.; WAHLEN, J. 1999. A Review of the Earnings Management Literature and Its Implications for Standard Settings. *Accounting Horizons*, vol. 13(4), 365–383.
- HERATH, S. K.; ALBARQI, N. 2017. Financial Reporting Quality: A Literature Review. *International Journal of Business Management and Commerce*, vol. 2(2), 1–14.
- HIRST, D.; HOPKINS, P.; WAHLEN, J. 2004. Fair Values, Income Measurement, and Bank Analysts' Risk and Valuation Judgments. *The Accounting Review*, vol. 79(2), 453–472.

- IASB. 2008. *Exposure Draft on an Improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information*. London.
- International Financial Reporting Standards Board [IFRSB]. 2018. *Conceptual Framework of IFRS*. Retrieved March 15, 2019. Available at <<https://www.ifrsbox.com/ifrs-conceptual-framework-2018/>>
- JONAS, G. J.; BLANCHET, J. 2000. Assessing Quality of Financial Reporting. *Accounting Horizons*, 14 (3): 353–363.
- JURKONIS, L. 2012. Valstybės valdomų įmonių valdymo kontrolės ir autonomijos poveikis veiklos efektyvumui. *Politologija*, no. 2, 3–31.
- JURKONIS, L.; GINEITIEŅĖ, Z. 2013. Valstybės valdomų įmonių valdymo efektyvumas – įmonių socialinės atsakomybės perspektyva. *Whither Our Economies – 2013: 3rd International Scientific Conference: Conference Proceedings*, 85–93.
- KATUTYTĖ, S. 2017. Finansinių ataskaitų kokybės vertinimo metodų pasirinkimas: teorinis aspektas, *Apskaitos ir finansų mokslas ir studijos, Problemos ir perspektyvos*, vol. 11, no.1, p. 24–31.
- KLOVIENĖ, R.; GIMŽAUSKIENĖ, E.; MISIŪNAS, D. 2015. The Significance of SOEs Performance Measurement as Policy Instrument in Baltic Countries. *Procedia – Social and Behavioral Sciences*, 213, 286–292.
- KUNDELINĖ, K. 2009. Apskaitos kokybė: kaip apibrėšime ir kuo matuosime? *Ekonomika ir vadyba*, 14, 85–91.
- KYTHREOTIS, A. 2014. Measurement of Financial Reporting Quality Based on IFRS Conceptual Framework's Fundamental Qualitative Characteristics. *European Journal of Accounting, Finance & Business*, vol. 2, no. 3, 4–29.
- LAMBERT, R.; LEUZ, C.; VERRECCHIA, R. E. 2007. Accounting Information, Disclosure, and the Cost of Capital. *Journal of Accounting Research*, vol. 45, no. 2, 385–420.
- LEGENZOVA, R. 2016. A Concept of Accounting Quality from Accounting Harmonization Perspective. *Economics and Business*, vol. 28, issue 1, 33–37.
- LIM, J.; LEE, J.; CHANG, J. 2015. Financial Reporting Quality of Target Companies and Acquirer Returns: Evidence from Korea. *International Journal of Accounting & Information Management*, vol. 23, issue 1, 16–41.
- Lithuanian Authority of Audit, Accounting, Property Valuation and Insolvency Management, 2017. Overview of the Quality Survey of the Financial Statements for 2017. Available at <<http://avnt.lt/assets/Veiklos-sritys/Apskaita/2017FAtyrimoapzvalgaV1.pdf>>.
- Lithuanian Law on Accounting No. IX-574. 2001. Available at <<https://www.e-tar.lt/portal/lt/legalAct/TAR.43178AA9832E>>.
- MACKEVIČIUS, J.; MARČINSKAS, A.; RAGAUSKIENĖ, E. 2012. Valstybės valdomų įmonių turto apskaitos, naudojimo efektyvumo ir valdymo aktualijos. *Viešieji ir privatus aktyvai: transformacijų, efektyvaus naudojimo ir vertinimo aspektai: konferencijos mokslo darbai*, 95–103.
- MARTINEZ-FERRERO, J. 2014. Consequences of Financial Reporting Quality on Corporate Performance. Evidence at the International Level. *Estudios de Economía*, vol. 41, no. 1.
- McDANIEL, L.; MARTIN, R.; MAINES, L. 2002. Evaluating Financial Reporting Quality: the Effects of Financial Expertise vs. Financial Literacy. *The Accounting Review*, vol. 77, 139–167.
- NICHOLS, D.; WAHLEN, J. 2004. How Do Earnings Numbers Relate to Stock Returns? A Review of Classic Accounting Research with Updated Evidence. *Accounting Horizons*, vol. 18(4), 263–286.
- NYOR, T. 2013. Financial Reporting Quality of Nigeria Firms: Users Perceptions'. *International Journal of Business and Social Sciences*, vol. 4(13), 273–279.
- OBAIDAT, A. N. 2007. Accounting Information Qualitative Characteristics Gap: Evidence from Jordan. *International Management Review*, vol. 3, no. 2, 26.
- PAIVA, I. S. 2018. Contracting Debt and the Quality of Financial Reporting in Private Firms. *Contaduría y Administración*, vol. 63, no.2, 1–18. Available at <<http://dx.doi.org/10.22201/fca.24488410e.2018.1663>>.
- PENMAN, S. H. 2002. The Quality of Financial Statements: Perspectives from the Recent Stock Market Bubble. *Working Paper*, Columbia University.
- PIVACA, S.; VUKOB, T.; CULARB, M. 2017. Analysis of Annual Report Disclosure Quality for Listed Companies in Transition Countries. *Economic Research-Ekonomska istraživanja*, vol. 30, no. 1, 721–731.
- RENKAS, J.; GONCHARENKO, O.; LUKIANETS, O. 2015. Quality of Financial Reporting: Approaches to Measuring. *International Journal of Accounting and Economics Studies*, vol. 4, no. 1, 1–5.
- RUDŽIONIENĖ, K.; JUOZAPAVIČIŪTĖ, T. 2013. Quality of Financial Reporting in Public Sector. *Socialiniai mokslai*, no. 4, 17–25.
- STANKEVIČIŪTĖ, I. 2016. Savivaldybių apskaitos informacijos atskleidimo kokybės vertinimas. *Studies in Modern Society*, 118–127.
- TAMULAITYTĖ, J. 2014. Apskaitos kokybės sampratos Lietuvoje tyrimas. *The Bridge to the Future*, no. 1(8), 315–319. Available at <<https://www.ebooks.ktu.lt/eb/1323/tiltas-i-ateiti-nr-1-8/>>.
- TANG, Q.; CHEN, H.; LIN, Z. 2016. How to Measure Country-level Financial Reporting Quality? *Journal of Financial Reporting and Accounting*, no. 14(2), 230–265.
- The Law on Financial Statements of Enterprises No. IX-575. 2001. Available at <<https://www.e-tar.lt/portal/lt/legalAct/TAR.132D0D75309C>>
- VAIČIULYTĖ, I.; RUDŽIONIENĖ, K. 2016. Konservatyvumo principas apskaitos kokybės kontekste. *Studies in Modern Society*, 128–136.
- VAN BEEST, F.; BRAAM, G.; SBOELEN, S. 2009. Quality of Financial Reporting: Measuring Qualitative Characteristics. *NiCe Working Paper 09-108*. Available at <<http://www.ru.nl/nice/workingpapers>>.
- WANG, F.; ZHU, Z.; HOFFMIRE, J. 2015. Financial Reporting Quality, Free Cash Flow, and Investment Efficiency. *SHS Web of Conferences*, vol. 17, no. 01027, 10.
- WILLEKENS, M. 2008. Effects of External Auditing in Privately Held Companies: Empirical Evidence from Belgium. *Working paper series*.

The article has been reviewed.

Received in January, 2019

Accepted in April, 2019

Contact person:

Kristina Rudžionienė, Vilnius University; Muitinės str. 8, LT-44280, Kaunas, Lithuania; e-mail: kristina.rudzioniene@knf.vu.lt
